



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Kanya ISHIZAKA

Group Art Unit: 2624

Application No.: 10/705,433

Examiner: J. TORRES

Filed: November 12, 2003

Docket No.: 117730

For: IMAGE PROCESSING APPARATUS, IMAGE PROCESSING METHOD, IMAGE
PROCESSING PROGRAM, AND STORAGE MEDIUM

REQUEST FOR RECONSIDERATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In reply to the January 16, 2008 Office Action, reconsideration of the rejection is respectfully requested in light of the following remarks.

Claims 1, 3-33 and 35 are pending in this application. The Office Action, in paragraph 5, indicates that claims 4-7, 12-15, 20-23 and 28-31 recite allowable subject matter. Specifically, the Office Action indicates that these claims would be allowable if rewritten in independent form including all the features of the base claim and any intervening claims. Applicant appreciates this indication of allowability but respectfully submits that at least independent claims 1 and 18, from which these claims directly or indirectly depend, are allowable for the reasons set forth below.

The Office Action, in paragraph 3, rejects claims 1, 3, 8-11, 18, 19, 24-27 and 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,701,369 to Moon et al. (hereinafter "Moon") in view of U.S. Patent No. 5,416,856 to Jacobs et al. (hereinafter

"Jacobs"). The Office Action, in paragraph 4, rejects claims 16, 17, 32 and 33 under 35 U.S.C. §103(a) as being unpatentable over Moon in view of Jacobs, and further in view of U.S. Patent No. 6,002,794 to Bonneau et al. (hereinafter "Bonneau"). These rejections are respectfully traversed.

In rejecting independent claims 1, 18 and 35, the Office Action concedes that Moon fails to teach the feature an improved domain block forming section for performing a pixel value conversion with respect to the reduced range block image formed by the reduced range block forming section, for outputting the pixel-value-converted reduced range block image as an improved domain block image, and the improved block forming section performs the pixel value conversion based upon the similarity degree obtained by the similarity degree judging section as positively recited in the pending claims. The Office Action indicates that Jacobs can reasonably be considered to remedy this shortfall in the application of Moon limited to the subject matter of the pending claims. Specifically, the Office Action alleges that the optimizer and transformer 30 shown in Fig. 7 of Jacobs can reasonably be considered to correspond to the claim improved domain block forming section. The Office Action particularly relies on col. 9, line 61-col. 10, line 16 of Jacobs in asserting that the optimizer and transformer corresponds to the claimed improved domain block forming section. The analysis of the Office Action fails for at least the following reason.

Jacobs teaches a method of encoding a digital image iterated image transformations to form and eventually contractive map. In the relied-upon sections of Jacobs, the reference specifically discloses that a digital image to be encoded as defined by an array of individual pixel elements, each pixel element being defined by coordinates indicative of pixel position and intensity. The image is stored in a memory. A partitioner generates a set of N ranges such that the ranges tile the image. Another partitioner generates a set of M domains. A domain is transformed using the optimized transformation at optimizer and transformer 30.

The error between the section of the image over a range and the result of applying the optimized transformation to the section of the image over a domain is calculated. This process is repeated for each of the M domains. A comparator selects the domain and corresponding transformation which best minimizes the error. At a temporary memory, information identified the selected domain and corresponding transformation are saved. This overall process is then repeated for each of the N ranges.

Selecting a domain and corresponding transformation which best minimizes an error cannot reasonably be considered to teach, or to have suggested, performing a pixel value conversion with respect to the reduced range block image formed by the reduced range block image forming section and outputting the pixel-value converted reduced range block image as an improved domain block and the improved domain block forming section performing pixel value conversion based upon the similarity degree obtained by the similarity degree judging section. Jacobs simply does not use such a comparison to perform the disclosed function.

The strained approach that the Office Action takes in attempting to render obvious the subject matter of the pending claims over this combination of references is unsupported based on at least the Jacobs disclosure for disclosing those features that the Office Action concedes the Moon reference does not disclose. Any comparison made in Jacobs is between the domains, and corresponding optimized transformations of domains, which best minimize errors therebetween. This cannot reasonably be considered to be expanded to include any similarity degree judging section which judges a similarity degree between the domain block image and the reduced range block image. In fact, each comparison disclosed in Jacobs is within a specific range and is then repeated for each of the N ranges. This positive disclosure indicates further that Jacobs cannot reasonably be considered to teach, or to have suggested, the features upon which the Office Action relies for Jacobs as teaching.

Bonneau is not applied in any manner which would overcome the above-identified shortfall in the application of at least Jacobs to the subject matter of the pending claims.

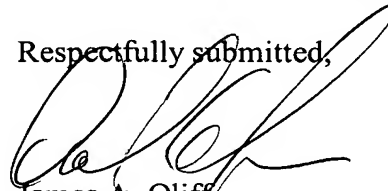
For at least the foregoing reasons, any permissible combination of Moon, Jacobs and Bonneau cannot reasonably be considered to have suggested the combinations of all of the features positively recited in independent claims 1, 18 and 35. Further, claims 3, 8-11, 16, 17, 19, 24-27, 32 and 33 also would not have been suggested by any permissible combination of these references for at least the respective dependence of these claims directly or indirectly on allowable base claims, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejections of claims 1, 3, 8-11, 16-19, 24-27, 32, 33 and 35 under 35 U.S.C. §103(a) as being unpatentable over any combination of the applied references, are respectfully requested.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3, 8-11, 16-19, 24-27, 32, 33 and 35, in addition to the indicated allowable subject matter of claims 4-7, 12-15, 20-23 and 28-31, are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,



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JAO:DAT/cfr

Date: April 10, 2008

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